

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/574,752
Source: IFwo
Date Processed by STIC: 11/28/06

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006

TIME: 14:45:42

Input Set : A:\TSRI9861SEQ.TXT

Output Set: N:\CRF4\11282006\J574752.raw

4 <110> APPLICANT: LUO, Yunping
 5 REISFELD, Ralph A.
 6 XIANG, Rong
 7 THE SCRIPPS RESEARCH INSTITUTE
 9 <120> TITLE OF INVENTION: DNA VACCINES AGAINST TUMOR GROWTH AND
 10 METHODS OF USE THEREOF
 12 <130> FILE REFERENCE: TSRI 986.1
 14 <140> CURRENT APPLICATION NUMBER: US 10/574,752
 15 <141> CURRENT FILING DATE: 2006-04-06
 17 <150> PRIOR APPLICATION NUMBER: PCT/US2004/033137
 18 <151> PRIOR FILING DATE: 2004-10-07
 20 <150> PRIOR APPLICATION NUMBER: US 60/509457
 21 <151> PRIOR FILING DATE: 2003-10-08
 23 <160> NUMBER OF SEQ ID NOS: 10
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 954
 29 <212> TYPE: DNA
 30 <213> ORGANISM: HOMO SAPIENS
 32 <400> SEQUENCE: 1
 33 agccgtgtac cccgcagagc cgccagcccc gggcatgttc cgagacttcg ggaaacccgg 60
 34 cccgagctcc gggAACGGCG gcgggtacgg cggcccccgg cagcccccg ccgcagcgca 120
 35 ggcagcccag cagaagtcc acctgggtcc aagcatcaac accatgagtg gcagtcagga 180
 36 gctgcagtgg atggtaacgc ctcatccct gggcccccagc agttacccca ggcctctgac 240
 37 ctacccttag tacagcccc cacaaccccg gccaggagtc atccgggcc tggggccgccc 300
 38 tccaggggta cgtcgaaggc cttgtgaaca gatcagcccg gaggaagagg agcgcgcgcg 360
 39 agtaaggcgc gagcggaaaca agctggctgc ggccaagtgc aggaaccgga ggaaggaact 420
 40 gaccgacttc ctgcaggcgg agactgacaa actggaagat gagaatctg ggctgcagcg 480
 41 agagattgag gagctgcaga agcagaagga gcgcctagag ctggtgctgg aagcccacccg 540
 42 acccatctgc aaaatcccg aaggagccaa ggagggggac acaggcagta ccagtggcac 600
 43 cagcagccca ccagccccct gccgcctgt accttgcatac tcccttccc cagggcctgt 660
 44 gcttgaacct gaggcaactgc acaccccccac actcatgacc acacccctccc taactcctt 720
 45 caccggcagc ctggttca cctaccccg cactcctgag cttgtgcct cagctcatcg 780
 46 caagagtgc agcagcagcg gagacccatc ctctgacccc cttggctctc caaccctctc 840
 47 cgctttgtga ggcgcctgag ccctactccc tgcagatgcc accctagcca atgtctcctc 900
 48 cccttccccc accggtccag ctggcctgga cagtatccca catccaactc cagc 954
 50 <210> SEQ ID NO: 2
 51 <211> LENGTH: 271
 52 <212> TYPE: PRT
 53 <213> ORGANISM: HOMO SAPIENS
 55 <400> SEQUENCE: 2
 56 Met Phe Arg Asp Phe Gly Glu Pro Gly Pro Ser Ser Gly Asn Gly Gly
 57 .1 5 10 15

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006
TIME: 14:45:42

Input Set : A:\TSRI9861SEQ.TXT
Output Set: N:\CRF4\11282006\J574752.raw

58 Gly Tyr Gly Gly Pro Ala Gln Pro Pro Ala Ala Ala Gln Ala Ala Gln
 59 20 25 30
 60 Gln Lys Phe His Leu Val Pro Ser Ile Asn Thr Met Ser Gly Ser Gln
 61 35 40 45
 62 Glu Leu Gln Trp Met Val Gln Pro His Phe Leu Gly Pro Ser Ser Tyr
 63 50 55 60
 64 Pro Arg Pro Leu Thr Tyr Pro Gln Tyr Ser Pro Pro Gln Pro Arg Pro
 65 65 70 75 80
 66 Gly Val Ile Arg Ala Leu Gly Pro Pro Gly Val Arg Arg Arg Pro
 67 85 90 95
 68 Cys Glu Gln Ile Ser Pro Glu Glu Glu Arg Arg Arg Val Arg Arg
 69 100 105 110
 70 Glu Arg Asn Lys Leu Ala Ala Lys Cys Arg Asn Arg Arg Lys Glu
 71 115 120 125
 72 Leu Thr Asp Phe Leu Gln Ala Glu Thr Asp Lys Leu Glu Asp Glu Lys
 73 130 135 140
 74 Ser Gly Leu Gln Arg Glu Ile Glu Glu Leu Gln Lys Gln Lys Glu Arg
 75 145 150 155 160
 76 Leu Glu Leu Val Leu Glu Ala His Arg Pro Ile Cys Lys Ile Pro Glu
 77 165 170 175
 78 Gly Ala Lys Glu Gly Asp Thr Gly Ser Thr Ser Gly Thr Ser Ser Pro
 79 180 185 190
 80 Pro Ala Pro Cys Arg Pro Val Pro Cys Ile Ser Leu Ser Pro Gly Pro
 81 195 200 205
 82 Val Leu Glu Pro Glu Ala Leu His Thr Pro Thr Leu Met Thr Thr Pro
 83 210 215 220
 84 Ser Leu Thr Pro Phe Thr Pro Ser Leu Val Phe Thr Tyr Pro Ser Thr
 85 225 230 235 240
 86 Pro Glu Pro Cys Ala Ser Ala His Arg Lys Ser Ser Ser Ser Gly
 87 245 250 255
 88 Asp Pro Ser Ser Asp Pro Leu Gly Ser Pro Thr Leu Leu Ala Leu
 89 260 265 270
 92 <210> SEQ ID NO: 3
 93 <211> LENGTH: 822
 94 <212> TYPE: DNA
 95 <213> ORGANISM: MUS MUSCULUS
 97 <400> SEQUENCE: 3
 98 atgtaccgag actacgggga accgggaccc agctccgggg ctggcagcgc gtacggtcgc 60
 99 cccgcgcagc ccccgcaagc tcaggcacag accgcccagc agcagaagg ccactttgtg 120
 100 ccaagcatcg acagcagcag ccaggaactg cactggatgg tgcagccctca tttcctggga 180
 101 cccactggct atccccgacc tctggcctat cccccagtaca gtccccctca gccccggcca 240
 102 ggagtcatac gagcccttagg gccacctccg ggggtgcgtc gcaggccctg cgagcagatc 300
 103 agcccagagg aggaagagcg ccgcagggtg agacgcgagc ggaacaagct agcagctgct 360
 104 aagtgcagaa accgaagaaa ggagctgaca gacttcctgc aggccggagac cgacaaaattg 420
 105 gaggatgaga aatcggggct gcagcggagag attgaagagc tgcagaagca gaaggaacgc 480
 106 cttgagctgg tgcttggaaagc ccatcgccctc atctgcaaaa tccccagaagg agacaagaag 540
 107 gaccctggc gttctggcag caccagcggg gctagcagcc caccagcccc cggccggcca 600
 108 gtgccttgca tctcccttcc tccaggaccc gtacttgaac cggaaggact gcatacccc 660
 109 acgctcatga ccacaccctc tctgactcct tttactccga gtctgggttt cacctatcct 720

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006

TIME: 14:45:42

Input Set : A:\TSRI9861SEQ.TXT

Output Set: N:\CRF4\11282006\J574752.raw

110 agcacaccag aaccttgctc ctccactcac cgaaagagta gcagcagcag tggcgacccc 780
 111 tcctccgacc ccctgggctc tcctacactc ctggcttgc ga 822
 113 <210> SEQ ID NO: 4
 114 <211> LENGTH: 273
 115 <212> TYPE: PRT
 116 <213> ORGANISM: MUS MUSCULUS
 118 <400> SEQUENCE: 4
 119 Met Tyr Arg Asp Tyr Gly Glu Pro Gly Pro Ser Ser Gly Ala Gly Ser
 120 1 5 10 15
 121 Ala Tyr Gly Arg Pro Ala Gln Pro Pro Gln Ala Gln Ala Gln Thr Ala
 122 20 25 30
 123 Gln Gln Gln Lys Phe His Phe Val Pro Ser Ile Asp Ser Ser Ser Gln
 124 35 40 45
 125 Glu Leu His Trp Met Val Gln Pro His Phe Leu Gly Pro Thr Gly Tyr
 126 50 55 60
 127 Pro Arg Pro Leu Ala Tyr Pro Gln Tyr Ser Pro Pro Gln Pro Arg Pro
 128 65 70 75 80
 129 Gly Val Ile Arg Ala Leu Gly Pro Pro Gly Val Arg Arg Arg Pro
 130 35 90 95
 131 Cys Glu Gln Ile Ser Pro Glu Glu Glu Arg Arg Arg Val Arg Arg
 132 100 105 110
 133 Glu Arg Asn Lys Leu Ala Ala Lys Cys Arg Asn Arg Arg Lys Glu
 134 115 120 125
 135 Leu Thr Asp Phe Leu Gln Ala Glu Thr Asp Lys Leu Glu Asp Glu Lys
 136 130 135 140
 137 Ser Gly Leu Gln Arg Glu Ile Glu Glu Leu Gln Lys Gln Lys Glu Arg
 138 145 150 155 160
 139 Leu Glu Leu Val Leu Glu Ala His Arg Leu Ile Cys Lys Ile Pro Glu
 140 165 170 175
 141 Gly Asp Lys Lys Asp Pro Gly Gly Ser Gly Ser Thr Ser Gly Ala Ser
 142 180 185 190
 143 Ser Pro Pro Ala Pro Gly Arg Pro Val Pro Cys Ile Ser Leu Ser Pro
 144 195 200 205
 145 Gly Pro Val Leu Glu Pro Glu Ala Leu His Thr Pro Thr Leu Met Thr
 146 210 215 220
 147 Thr Pro Ser Leu Thr Pro Phe Thr Pro Ser Leu Val Phe Thr Tyr Pro
 148 225 230 235 240
 149 Ser Thr Pro Glu Pro Cys Ser Ser Thr His Arg Lys Ser Ser Ser Ser
 150 245 250 255
 151 Ser Gly Asp Pro Ser Ser Asp Pro Leu Gly Ser Pro Thr Leu Leu Ala
 152 260 265 270
 153 Leu
 157 <210> SEQ ID NO: 5
 158 <211> LENGTH: 1145
 159 <212> TYPE: DNA
 160 <213> ORGANISM: HOMO SAPIENS
 162 <400> SEQUENCE: 5
 163 attctctccc cagcttgctg agcccttgc tccccctggcg actgcctgga cagtcagcaa 60
 164 ggaattgtct cccagtgcattttgccctcc tggctgccaa ctctggctgc taaaaggcgct 120

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006
TIME: 14:45:42

Input Set : A:\TSRI9861SEQ.TXT
Output Set: N:\CRF4\11282006\J574752.raw

165 gcccacccgtct gcagtctaca cagttcggg aagaggaaag gaacctcaga ccttccat 180
 166 cgcttcctct cgcaacaaac tatttgcgc aggaataaag atggctgtg aaccagtata 240
 167 agacaattgc atcaactttg tggcaatgaa atttattgac aatacgctt actttatagc 300
 168 tgaagatgat gaaaacctgg aatcagatta ctggcaag cttgaatcta aattatcagt 360
 169 cataagaaat ttgaatgacc aagttctt cattgaccaa gggaaatcgcc ctctatttg 420
 170 agatatgact gattctgact gttagagataa tgccccccg accatattta ttataagtat 480
 171 gtataaagat agccagccata gaggttatggc tgtaactatc tctgtgaagt gtgagaaat 540
 172 ttcaactctc tcctgtgaga acaaaaattat ttcccttaag gaaatgaatc ctccgtata 600
 173 catcaaggat acaaaaagtg acatcatatt ctggagaga agtgtcccg gacatgataa 660
 174 taagatgcaat ttgaatctt catcatacga aggatactt ctgttgc 4aaaagagag 720
 175 agacccctttt aaactcattt tgaaaaaaga ggatgaattt ggggatagat ctataatgtt 780
 176 cactgttcaa aacgaagact agcttattaa atttcattgcc gggcgcagtg gctcacgcct 840
 177 gtaatcccag ccctttggg ggctgaggcg ggcagatcac cagaggtcag gtgttcaaga 900
 178 ccagcctgac caacatggtg aaacctcatc tctactaaaa atacaaaaaaa ttagctgagt 960
 179 gtgtgacgc atgcctcaa tcccgactac tcaagaggct gaggcaggag aatcacttgc 1020
 180 actccggagg tagagggtgt ggtgagccga gattgcacca ttgcgtctta gcctgggcaa 1080
 181 caacagcaaa actccatctc aaaaaataaa ataaataaaat aaacaataaa aaaattcata 1140
 182 atgtg 1145
 184 <210> SEQ ID NO: 6
 185 <211> LENGTH: 193
 186 <212> TYPE: PRT
 187 <213> ORGANISM: HOMO SAPIENS
 189 <400> SEQUENCE: 6
 190 Met Ala Ala Glu Pro Val Glu Asp Asn Cys Ile Asn Phe Val Ala Met
 191 1 5 10 15
 192 Lys Phe Ile Asp Asn Thr Leu Tyr Phe Ile Ala Glu Asp Asp Glu Asn
 193 20 25 30
 194 Leu Glu Ser Asp Tyr Phe Gly Lys Leu Glu Ser Lys Leu Ser Val Ile
 195 35 40 45
 196 Arg Asn Leu Asn Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro
 197 50 55 60
 198 Leu Phe Glu Asp Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg
 199 65 70 75 80
 200 Thr Ile Phe Ile Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met
 201 85 90 95
 202 Ala Val Thr Ile Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys
 203 100 105 110
 204 Glu Asn Lys Ile Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile
 205 115 120 125
 206 Lys Asp Thr Lys Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly
 207 130 135 140
 208 His Asp Asn Lys Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe
 209 145 150 155 160
 210 Leu Ala Cys Glu Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys Lys
 211 165 170 175
 212 Glu Asp Glu Leu Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn Glu
 213 180 185 190
 214 Asp
 218 <210> SEQ ID NO: 7

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006
TIME: 14:45:42

Input Set : A:\TSRI9861SEQ.TXT
Output Set: N:\CRF4\11282006\J574752.raw

```

219 <211> LENGTH: 579
220 <212> TYPE: DNA
221 <213> ORGANISM: MUS MUSCULUS
223 <400> SEQUENCE: 7
224 atggctgcca tgcagaaga ctcttgcgtc aacttcaagg aaatgatgtt tattgacaac 60
225 acgcttact ttatacctga agaaaatgga gaccgttgaat cagacaacct tggccgactt 120
226 cactgtacaa ccgcgttaat acggaatata aatgaccaag ttctttcggt tgacaaaaga 180
227 cagcctgtgt tcgaggatatt gactgtatatt gatcaaagtgc ccagtgaacc ccagaccaga 240
228 ctgataatat acatgtacaa agacagtgaa gtaagaggac tggctgtgac cctctctgtg 300
229 aaggatagta aaatgtctac cctcttcgtt aagaacaaga tcatttcctt tgaggaaatg 360
230 gatccacctg aaaatattga tgatatacaa agtgatctca tatttttcga gaaacgtgtt 420
231 ccaggacaca acaagatgga gtttgaatct tcactgtatg aaggacactt tcttgcttgc 480
232 caaaaagaaatgatgcttt caaactcatt ctgaaaaaaaaa aggtgaaaaa tggggataaaa 540
233 tctgtaatgt tcactctcac taacttacat caaagtttag 579
235 <210> SEQ ID NO: 8
236 <211> LENGTH: 192
237 <212> TYPE: PRT
238 <213> ORGANISM: MUS MUSCULUS
240 <400> SEQUENCE: 8
241 Met Ala Ala Met Ser Glu Asp Ser Cys Val Asn Phe Lys Glu Met Met
242 1 5 10 15
243 Phe Ile Asp Asn Thr Leu Tyr Phe Ile Pro Glu Asn Gly Asp Leu
244 20 25 30
245 Glu Ser Asp Asn Phe Gly Arg Leu His Cys Thr Thr Ala Val Ile Arg
246 35 40 45
247 Asn Ile Asn Asp Gln Val Leu Phe Val Asp Lys Arg Gln Pro Val Phe
248 50 55 60
249 Glu Asp Met Thr Asp Ile Asp Gln Ser Ala Ser Glu Pro Gln Thr Arg
250 65 70 75 80
251 Leu Ile Ile Tyr Met Tyr Lys Asp Ser Glu Val Arg Gly Leu Ala Val
252 85 90 95
253 Thr Leu Ser Val Lys Asp Ser Lys Met Ser Thr Leu Ser Cys Lys Asn
254 100 105 110
255 Lys Ile Ile Ser Phe Glu Glu Met Asp Pro Pro Glu Asn Ile Asp Asp
256 115 120 125
257 Ile Gln Ser Asp Leu Ile Phe Phe Gln Lys Arg Val Pro Gly His Asn
258 130 135 140
259 Lys Met Glu Phe Glu Ser Ser Leu Tyr Glu Gly His Phe Leu Ala Cys
260 145 150 155 160
261 Gln Lys Glu Asp Asp Ala Phe Lys Leu Ile Leu Lys Lys Lys Asp Glu
262 165 170 175
263 Asn Gly Asp Lys Ser Val Met Phe Thr Leu Thr Asn Leu His Gln Ser
264 180 185 190
267 <210> SEQ ID NO: 9
268 <211> LENGTH: 228
269 <212> TYPE: DNA
270 <213> ORGANISM: MUS MUSCULUS
272 <400> SEQUENCE: 9
273 atgcagatct tcgtgaagac cctgaccggc aagaccatca ccctagaggt ggagcccagt 60

```

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/574,752

DATE: 11/28/2006
TIME: 14:45:43

Input Set : A:\TSRI9861SEQ.TXT
Output Set: N:\CRF4\11282006\J574752.raw